Abstract

The invention discloses a method for dynamically allocating link bandwidth on resilient packet ring. This algorithm comprises the steps of measuring a group of variables in one advertisement interval, calculating the local fair rate using the measured variables, determining an advertising rate based on the local fair rate, and transmitting the data packets with the advertising rate. Compared with existing fairness algorithms, the new algorithm introduces integration for the idle rate to achieve 100% of bandwidth utilization. It also avoids using the concept of "congestion state" which is essential in the existing fairness algorithm.